Non-causal time series models for speculative bubble prediction

Speculative bubbles in financial markets can result in dramatic damages to portfolio performances and threaten the stability of the financial system. Autoregressive and moving average processes known as non-causal time series models have proved their capacity to reproduce standardised facts from speculative bubbles such as locally explosive trajectories. On condition that their dynamics are better understood, they will allow the formulation of predictions on future bubble trajectories. However, understanding regarding the prediction of non-causal processes remains limited. The EU-funded NONCAUSALBubble project will focus on the lack of theoretical
foundations for the forecasting of strong non-causal processes. The project will be based on recent developments of extreme value and alpha-stable distribution theories. Analytical assessment of crash probabilities will lead to an intuitive prediction model of bubble identification.

Fields of science

social sciences > economics and business > economics > econometrics

Keywords

Noncausal processes, Explosive Bubbles, Forecasting, Econometric theory

Programme(s)

H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility

Topic(s)

MSCA-IF-2019 - Individual Fellowships

Call for proposal

H2020-MSCA-IF-2019

See other projects for this call

Funding Scheme

MSCA-IF - Marie Skłodowska-Curie Individual Fellowships (IF)

Coordinator

STICHTING VU
Net EU contribution

€ 187 572,48

Address
De boelelaan 1105
1081 HV Amsterdam
Netherlands

Region
West-Nederland > Noord-Holland > Groot-Amsterdam

Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Other funding

€ 0,00

EC signature date  30 April 2020
Last update:  24 July 2023

Permalink:  https://cordis.europa.eu/project/id/896504

European Union, 2023